

The Global Impact of Brexit Uncertainty

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AN INCOMPLETE SUMMARY OF THE PAPER

- ▶ Develops a new measure of exposure to Brexit for firms in UK and 70 other countries
 - ▶ Based on textual analysis of conference-call discussions of quarterly earnings
 - ▶ Splits exposure into “first moment” (sentiment) and “second moment” (uncertainty)
- ▶ Reports many fascinating findings. Focus on two sets:
 1. Brexit (negative) sentiment (1st moment) reduces firms' market values but has no effect on investment rates or employment growth.
 2. Uncertainty (2nd moment) reduces firms' market values, investment rates and employment growth.

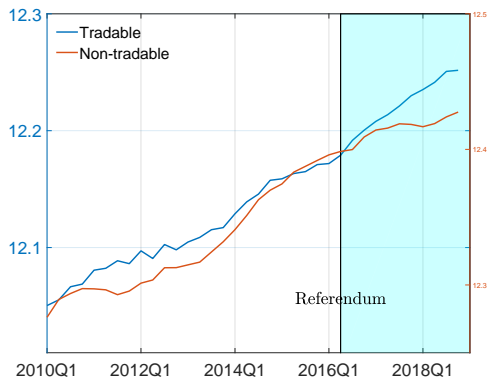
HOW DO WE BUILD A NARRATIVE?

- ▶ Brexit sentiment is overwhelmingly negative
 - ▶ it reduces **market value** but has no impact on investment or employment decisions.
 - ▶ the (negative) first moment has no effect on actions.
- ▶ Uncertainty (around first moment) has significant effects
 - ▶ it reduces **market value, investment and employment.**
- ▶ Is uncertainty all that matters?

FROM A UK FIRM PERSPECTIVE

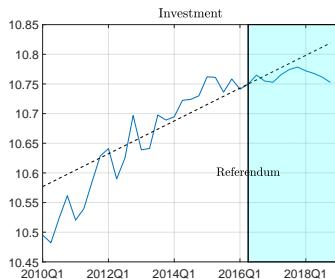
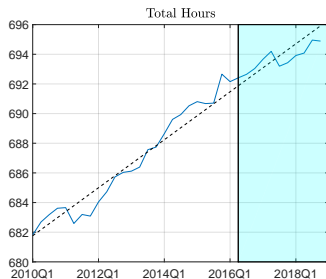
- ▶ Why was there no effect from first-moment on I or L?
 - ▶ Brexit shock might be negative, but in the future (negative news shock on future tradables' productivity)
 - ▶ Short term, huge sterling depreciation (15 percent on impact).
 - ▶ "Sweet spot" for exporters. Large fall in domestic costs. Increase in profitability.
 - ▶ Consistent with negative view on Brexit (for those most exposed) but no impact on investment or employment growth. (Broadbent, Di Pace, Drechsel, Harrison, and Tenreyro (2019))
- ▶ But why did uncertainty have a more immediate impact?
 - ▶ Effect on employment **growth** is small. (Unemployment reached record lows in post-Referendum period.)
 - ▶ Effect on investment was not immediate, despite the early spike in uncertainty; fall in investment built up over time.

UK MACRO CHANGES (1/2)



- ▶ “Sweet spot” in tradable sector, given sharp depreciation (Broadbent, Di Pace, Drechsel, Harrison, and Tenreyro (2019))
- ▶ Most exposed sector in long(er) run, was the winner in short run. First-moment effect was offset in short run

MACRO CHANGES (2/2)



- ▶ Robust labor market, flattening and later fall in investment (Broadbent, Di Pace, Drechsel, Harrison, and Tenreyro (2019))
- ▶ Most exposed sector in “long run”, was the winner in short run

FROM A FOREIGN FIRM PERSPECTIVE

- ▶ Brexit sentiment associated with fall in market value, no effect on I, L.
 - ▶ Short term, sterling depreciation (-); but UK policy stimulus package: boost in demand (+).
 - ▶ “Sweet spot” for importers or firms sourcing inputs from UK. “Worse deal” for exporters. A near wash on average?
 - ▶ Consistent with negative sentiment on Brexit (long run). In the short run, **sterling** effect (-) and **UK policy stimulus** (+)
- ▶ But why is uncertainty having a big impact in short run?
 - ▶ Effect on employment **growth** is small. (Labour markets kept tightening, with unemployment reaching record lows in post referendum period.)
 - ▶ Effect on investment also small (with exceptions, e.g. Ireland)

COMMENT 1: CONNECT WITH MACRO. STERLING AND EMPLOYMENT

- ▶ Sterling fell by 20% vis-a-vis the USD in the six months following the referendum
 - ▶ Macro data suggests ER acted as a shock absorber. The most (negatively) exposed benefited the most in the short run.
 - ▶ can explore the role of ER across firms with different exposure: ER-Brexit exposure interaction, different for UK/nonUK and importers/exporters
 - ▶ separate interaction for UK policy boost
- ▶ Post referendum, many AE economies reached historical highs in employment and historical lows in unemployment.
 - ▶ Some arithmetic on the uncertainty effect on employment.
 - ▶ All firms: $-0.39 \times 0.195 = -0.076$ pp fall in employment growth (compared with a sample average of 8.1% or median 2.9%)
 - ▶ US: -0.13%; Ireland: -0.62%

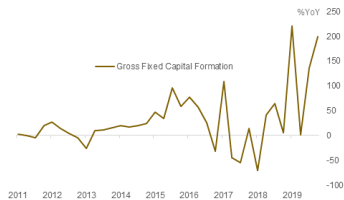
PRESENTATION - EMPLOYMENT GROWTH

Brexit Risk and Estimated Average Effects

<i>Country</i>	<i>Mean Brexit Risk</i>	<i>Estimated effect (%) on dEmp/Emp</i>	<i>Percentage Points</i>	<i>Mean growth</i>
All firms	0.196	-0.71	-0.076	8.1
USA	0.111	-1.21	-0.132	
Ireland	1.681	-4.21		
UK Channel Islands	1.174	-3.30		
UK	1.000	-4.25		
South Africa	0.579	-8.10		
Netherlands	0.444	-2.04		
Denmark	0.434	-1.84		
France	0.386	-2.59		
Belgium	0.372	-2.24		
Switzerland	0.326	-2.79		
Finland	0.116	-2.06		
Singapore	0.314	-1.82		
Germany	0.304	-1.71		
Spain	0.287	-2.48		
South Korea	0.151	-2.56		

► Growth rates of growth rates are hard to read.

A FOOTNOTE ON IRELAND

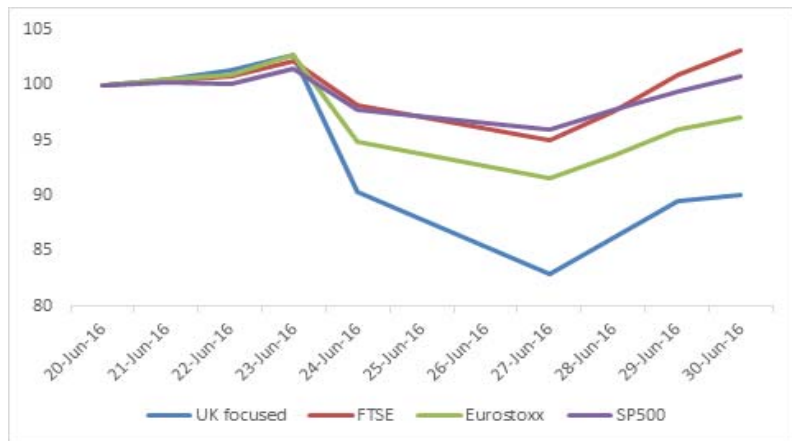


- ▶ Slight slow down in employment growth, but in the context of tight labour market
- ▶ Investment: more action, though odd case.

COMMENT 2: CONNECT W MACRO - STOCK RETURNS

- ▶ Brexit sentiment and Brexit risk together account for more than $1/3$ of the fall in stock returns around the referendum.
- ▶ U-shaped pattern of sentiment and risk can mimic very well the aggregate data.
- ▶ Textual information might have more value as leading indicator for employment and investment than for stocks. But still super interesting result!

STOCK RETURNS



COMMENT 3: CONNECT WITH MACRO - INVESTMENT

- ▶ Macro slow down in investment, despite fairly strong global growth 2016-2018
- ▶ How much can be accounted for by Brexit uncertainty?

COMMENT 3: CONNECT WITH MACRO - INVESTMENT

- ▶ What matters for investment (Broadbent (2019)):
 1. The **size of the downside risk**
 2. The **horizon** at which uncertainty is expected to be resolved.
 - ▶ If firms expect uncertainty to be resolved soon, the option-value of waiting is high: Postpone investment
 - ▶ If firms expect uncertainty to persist, the opposite is true and they will continue investing (after all, the project will be completed before the resolution)
- ▶ UK Investment did not fall immediately after the EU referendum (despite the increase in uncertainty). It started to fall later on. Series of key dates generated rolling uncertainty.

A QUIBBLE: *despite* IS THE MODAL POSITIVE-TONE WORD

Positive Tone Words
(top 50)

Word	Frequency	Word	Frequency
despite	250	improvement	23
good	231	greater	23
strong	170	profitability	23
positive	162	benefited	23
opportunities	99	improving	23
great	98	stability	20
opportunity	70	improve	19
better	67	optimistic	19
stable	65	advantage	16
able	55	favorable	14
benefit	49	stabilize	13
leading	48	rebound	13
confident	37	strengthening	12
progress	35	gain	11
pleased	33	successful	11
improved	31	tremendous	11
gains	29	excellent	11
stronger	28	successfully	9
strength	26	achieve	9
best	24	stabilized	9

- ▶ "despite Brexit" (+) v. "despite Brexit promises / opportunities/ benefits/ advantages/ (-) profitability"

ANOTHER QUIBBLE: SALES

Exposure to:

Variable	1st Moment Sentiment (negative)	2nd Moment Uncertainty
Investment rate	0	Negative
Employment growth	0	Negative
Market value	Negative	Negative
Sales growth	Negative	0

- ▶ Sales growth falls with sentiment but not with uncertainty.
- ▶ Is the fall in sales growth of those most exposed to Brexit sentiment explained by the depreciation? For given sales' volume, firms most exposed to Brexit sentiment (and hence sterling) probably saw biggest drop in sales values when expressed in USD
- ▶ Square sales with employment

BOTTOM LINE

- ▶ A creative, thorough and beautifully written paper on a topic of relevance for academics and policy makers.
- ▶ A big step in bridging micro and macro
- ▶ On the practical side, method could be an inexpensive substitute for firm surveys. Perhaps next step is to compare with survey performances?

BIBLIOGRAPHY

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BROADBENT, B., F. DI PACE, T. DRECHSEL, R. HARRISON, AND S. TENREYRO (2019): “The Brexit vote, productivity growth and macroeconomic adjustments in the United Kingdom,” .